

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

AIR QUALITY OPERATING PERMIT

Permit No. 85TVP01

Application No. 85

Issue Date: September 7, 2001

Expiration Date: September 6, 2006

The Department of Environmental Conservation, under the authority of AS 46.14 and 18 AAC 50, issues an operating permit to the Permittee, **XTO Energy Inc.**, for the operation of **Platform C**.

This permit satisfies the obligation of the owner and operator to obtain an operating permit as set out in AS 46.14.130(b).

As required by AS 46.14.120(c), the Permittee shall comply with the terms and conditions of this operating permit.

John F. Kuterbach, Manager

Air Permits Program

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List of Abbreviations Used in this Permit

AAC	Alaska Administrative Code
ADEC	Alaska Department of Environmental Conservation
AS.....	Alaska Statutes
ASTM.....	American Society for Testing and Materials
C.F.R.	Code of Federal Regulations
COMS	Continuous Opacity Monitoring System
dscf.....	Dry standard cubic feet
EPA	US Environmental Protection Agency
gr./dscf.....	grain per dry standard cubic feet (1 pound = 7000 grains)
GPH.....	gallons per hour
HAPs	Hazardous Air Pollutants [hazardous air contaminants as defined in AS 46.14.990(14)]
ID.....	Source Identification Number
kPa.....	kiloPascals
MACT	Maximum Achievable Control Technology
MMCF.....	Million cubic feet
NESHAPs.....	Federal National Emission Standards for Hazardous Air Pollutants [as defined in 40 C.F.R. 61 and 40 C. F. R. 63]
NSPS	Federal New Source Performance Standards [as defined in 40 C.F.R. 60]
ppm.....	Parts per million
PS	Performance specification
PSD	Prevention of Significant Deterioration
RM.....	Reference Method
SIC.....	Standard Industrial Classification
SO ₂	Sulfur dioxide
TPH	Tons per hour
TPY	Tons per year
VOC	volatile organic compound [as defined in 18 AAC 50.990(103)]
wt%.....	weight percent

Section 1. Identification

Names and Addresses

Permittee:	XTO Energy Inc. 810 Houston St. Fort Worth, TX 76102-6298
Facility:	Platform C
Location:	60° 45' 50" North; 151° 30' 08" West
Physical Address:	Middle Ground Shoal, Cook Inlet
Owner:	XTO EnergyOil Company 810 Houston St. Fort Worth, TX 76102-6298
Operator:	XTO Energy Inc. 810 Houston St. Fort Worth, TX 76102-6298
Permittee's Responsible Official	Doug Schultze, Vice President Operations XTO Energy Inc. Alaska & Midland District 3000 N. Garfield, Suite 175 Midland, TX 79705
Designated Agent:	CSC-The U. S. Corporation Company 801 West 10th Street, Suite 300 Juneau, AK 99801
Facility and Building Contact:	D. L. Marshall, Production Sperintendent XTO Energy Inc. 52260 Shell Road Kenai, AK 99611-9704 (907) 776-2506
Fee Contact:	Nina Hutton, Environmental & Safety Director XTO Energy Inc. 810 Houston St. Fort Worth, TX 76102-6298 (817) 885-2274

SIC Code of the Facility: 1311 - Crude Petroleum & Natural Gas

[18 AAC 50.350(b), 1/18/97]

Section 2. General Emission Information

Emissions of Regulated Air Contaminants, as provided in the Permittee's application:

Particulate Matter (PM-10), Sulfur Oxides (SO₂), Nitrogen Oxides (NO_x), Carbon Monoxide (CO), Volatile Organic Compounds (VOC) and insignificant quantities of other air contaminants.

Operating Permit Classifications:

1. 18 AAC 50.325(b)(1)

Facility Classifications as described under 18 AAC 50.300(b)-(f):

1. 18 AAC 50.300(c)(1)

[18 AAC 50.350(b), 1/18/97]

Section 3. Fee Requirements

- 1. General.** The Permittee shall pay assessed fees in accordance with AS 46.14.240 -- 250 and 18 AAC 50.400 -- 420.

[18 AAC 50.350(c) & 18 AAC 50.400 – 420, 1/18/97]

- 2. Assessable Emissions.** The Permittee shall pay to the department an annual emission fee based on the facility's assessable emissions. The assessable emission fee rate is listed in 18 AAC 50.410(b). The Department will assess fees for each ton of air contaminants that the facility emits or has the potential to emit in quantities greater than 10 tons per year. The quantity for which fees will be assessed is either:

- 2.1 the facility's projected annual rate of emissions that will occur from July 1 to the following June 30, based upon previous actual annual emissions, when demonstrated by
 - a. an enforceable test method described in 18 AAC 50.220;
 - b. material balance calculations;
 - c. Emission factors from EPA's publication AP-42, Vol. I, adopted by reference in 18 AAC 50.035; or
 - d. other methods and calculations approved by the department; or
- 2.2 the facility's assessable potential to emit of 1,517 TPY (958 tons of NO_x, 103 tons of SO₂, 373 tons of CO, 33 tons of PM-10 and 50 tons of VOCs).

[18 AAC 50.350(c) & 18 AAC 50.410, 1/18/97]

- 3. Assessable Emission Estimates.** Emission fees will be assessed as follows:

- 3.1 No later than March 30 of each year, the Permittee may submit an estimate of the facility's assessable emissions to ADEC, Air Permits Program, ATTN: Assessable Emission Estimate, 410 Willoughby Ave., Juneau, AK 99801-1795. The submittal must include all of the assumptions and calculations used to estimate the assessable emissions in sufficient detail so the department can verify the estimates, or
- 3.2 If no estimate is received on or before June 1 of each year, emission fees for the next fiscal year will be based on the potential to emit set forth in condition 2.2.

[18 AAC 50.350(c) & 18 AAC 50.410, 1/18/97]

Section 4. Source Inventory and Description

Sources listed below have specific monitoring, record keeping, or reporting conditions in this permit. Source descriptions and ratings are given in Table 1 for identification purposes only.

Table 1 Source Inventory

ID	Source Name	Source Description	Rating/size	Install Date
Gas Fired Turbines				
1	WF-2 Gas Turbine Gen.	Solar Saturn, TS-1001S	1100 Hp	1969
2	ACT-1 Gas Turbine Gen.	Solar Saturn, TS-1001S	1100 Hp	1973
Gas Fired Engines				
3	AC Pwr. Gen. C-AC1	Waukesha GSI-5790	804 Hp	1967
4	AC Pwr. Gen. C-AC2	Waukesha GSI-5790	804 Hp	1967
5	DC Pwr. Gen. C-DC6	Waukesha L7042G	804 Hp	1999-R
6	Compressor C-CB1	Cooper-Bessemer GMVA-8	1,100 Hp	1967
7	Compressor C-CLRK1	Clark TMB-10	660 Hp	1967
Diesel Fired Engines				
8	DC Pwr. Generator PDC-1	Cat. D399	1000 Hp	1987-R
9	Emerg. Generator C-EG1	Cat. D343 (plan to remove)	380 Hp	1967
10	DC Rig Power C-ACDC1	Cat. D399	1000 Hp	1987-R
11	DC Rig Power C-DC5	Cat. D399	1000 Hp	1987-R
12	Crane Engine C-WC1	Cummins NTC 335 FFC	335 Hp	2000-R
13	Crane Engine C-EC1	Cummins H-6-BI	320 Hp	1967
Miscellaneous				
14	Emergency. Lt Wtr. Pump	Detroit Diesel DD-6-71 (Hours Limit)	192 Hp	1970
15	Emergency. Fire Wtr. Pump	JF61P (Hours Limit)	320 Hp	1967
16	Flare			1967

Section 5. Source-Specific Requirements

Fuel Burning Equipment

Visible Emissions

4. The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from Source IDs 1–16 to reduce visibility through the exhaust effluent by greater than 20% for more than three minutes in any one hour.

Monitor, record and report according to Section 13.

[18 AAC 50.055(a)(1), 1/18/97; 18 AAC 50.350(d)(1)(C), 6/21/98; & 18 AAC 50.350(g) – (i), 1/18/97]

Particulate Matter

5. The Permittee shall not cause or allow particulate matter emitted from Source IDs 1–16 to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

Monitor, record and report according to Section 13.

[18 AAC 50.055(b)(1), 1/18/97; 18 AAC 50.350(d)(1)(C), 6/21/98; & 18 AAC 50.350(g) – (i), 1/18/97]
[18 AAC 50.040(e), 1/18/97]

Sulfur Compound Emissions

6. The Permittee shall not cause or allow sulfur compound emissions, expressed as SO₂, from Source IDs 1–16 to exceed 500 PPM averaged over three hours.

[18 AAC 50.055(c), 1/18/97; 18 AAC 50.350(d)(4), 6/21/98]
[18 AAC 50.040(e), 1/18/97]

6.1 Diesel Fuel

- a. Obtain a statement or receipt from the fuel supplier for each fuel shipment received that certifies either the fuel sulfur content or that the fuel grade is DF-1 or DF-2. If a certificate is not available from the supplier, then analyze a representative sample of the fuel to determine the sulfur content using ASTM method D129-00, D1266-98, D1552-95, D2622-98, D4294-98, D4045-99.
- b. Report under condition 34 whenever fuel combusted causes sulfur compound emissions to exceed the standard of condition 6; this fuel sulfur content is the basis of the SO₂ potential to emit in condition 2.2. When reporting under this condition, include a material balance calculation of the sulfur compound emissions, in ppm of SO₂, expected from this fuel, made using the equations in Section 15.
- c. Record the fuel sulfur content or the fuel grade of each shipment required under condition 6.1a and record all material balance calculations required under condition 6.1b.

- d. Attach copies of the records required by condition 6.1c with the facility operating reports required by condition 36.

[18 AAC 50.350(g)-(i), 1/18/97]

6.2 Fuel Gas

- a. Obtain a semiannual statement or receipt from the fuel supplier certifying the fuel gas H_2S concentration in ppm. If a certificate is not available from the supplier, then analyze a representative sample of the fuel semiannually to determine the sulfur content using 40 CFR 60, Appendix A, Method 11.
- b. Report under condition 34 whenever the H_2S concentration of the fuel gas obtained or analyzed exceeds 4000 ppm. This H_2S concentration is the basis for the SO_2 potential to emit in condition 2.2.
- c. Record the H_2S concentration of the fuel gas required under condition 6.2a.
- d. Attach copies of the records required by condition 6.2c with the facility operating reports required by condition 36.

[18 AAC 50.350(g)-(i), 1/18/97]

[18 AAC 50.410(c), 1/18/97]

Section 6. Facility-Wide Requirements

PSD Avoidance Limits

The Permittee requested condition 7 for Source IDs 12, 13, 14 and 15 in order to avoid classification as a Prevention of Significant Deterioration Major Facility. The operational limits below are intended to prevent the facility from exceeding the 40 tpy increment for nitrogen oxides.

7. The Permittee shall limit the operating hours for Source IDs 12, 13, 14 and 15 as shown in Table 2:

Table 2 Operational Limits

Source ID	Source Description	Operating Hrs Limit in any consecutive 12-month period
12	Crane Engine C-WC1	1,460
13	Crane Engine C-EC1	1,460
14	Emer. Lt. Wtr. Pump,	52
15	Emer. Fire Wtr.	6

[18 AAC 50.350(e)(3), 1/18/97]

- 7.1 The Permittee shall maintain a monthly log for Source IDs 12, 13, 14 and 15 showing the number of operating hours each month and the total hours in the previous consecutive twelve-month period.

[18 AAC 50.350(g)-(h), 1/18/97]

- 7.2 The Permittee shall submit summaries of the records of condition 7.1 under condition 36.

[18 AAC 50.350(i), 1/18/97]

- 7.3 The Permittee shall report under condition 34 whenever the operating hours of any Source ID 12, 13, 14 or 15 exceeds the limits in condition 7.

[18 AAC 50.350(i), 1/18/97]

Section 7. Insignificant Sources

This section contains the requirements that the Permittee identified under 18 AAC 50.335(q)(2) as applicable to insignificant sources at the facility. This section also specifies the testing, monitoring, reporting, and recordkeeping for insignificant sources that the department finds necessary to ensure compliance with the applicable requirements. Insignificant sources are not exempted from any air quality control requirement or federally enforceable requirement.

As set out in 18 AAC 50.350(m), the shield of AS 46.14.290 does not apply to insignificant sources.

8. The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from an industrial process, fuel-burning equipment, or an incinerator to reduce visibility through the exhaust effluent by greater than 20% for more than three minutes in any one hour.

[18 AAC 50.050(a)(2) & 18 AAC 50.055(a)(1), 1/18/97]

9. The Permittee shall not cause or allow particulate matter emitted from an industrial process or fuel-burning equipment to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

[18 AAC 50.055(b)(1), 1/18/97]

10. The Permittee shall not cause or allow sulfur compound emissions, expressed as SO₂, from an industrial process or fuel-burning equipment, to exceed 500 PPM averaged over three hours.

[18 AAC 50.055(c), 1/18/97]

11. Based on reasonable inquiry, the Permittee shall certify compliance with the requirements specified in conditions 8, 9 and 10 as set out in condition 37.

[18 AAC 50.350(m)(3), 9/4/98]

Section 8. Generally Applicable Requirements

- 12. Asbestos NESHAP.** The Permittee shall comply with the requirements set forth in 40 C.F.R. 61.145, 61.150, and 61.152, and the applicable sections set forth in 40 C.F.R. 61, Subpart A and Appendix A.

[18 AAC 50.040(b)(3) & 18 AAC 50.350(d)(1), 1/18/97]
[Federal Citation: 40 C.F.R. 61, Subpart M, 12/19/96]

- 13. Refrigerant Recycling and Disposal.** The Permittee shall comply with the standards for recycling and emission reduction of refrigerants set forth in 40 C.F.R. 82, Subpart F.

[18 AAC 50.040(d) & 18 AAC 50.350(d)(1), 1/18/97]
[Federal Citation: 40 C.F.R. 82, Subpart F, 7/1/99]

- 14. Good Air Pollution Control Practice.** The Permittee shall install, maintain and operate in accordance with the manufacturer's procedures, fuel burning equipment, process equipment, emission control devices, testing equipment and monitoring equipment to provide optimum control of air contaminant emissions during all operating periods. This condition is not federally-enforceable.

[18 AAC 50.030, 1/1/00 & 18 AAC 50.350(f)(2)-(3), 1/18/97]

- 15. Dilution.** The Permittee shall not dilute emissions with air to comply with this permit.

[18 AAC 50.045(a), 1/18/97]

- 16. Bulk Materials Handling, Construction and Industrial Activities.** The Permittee shall take reasonable precautions to prevent particulate matter from being emitted into the ambient air as a result of industrial activities, construction projects, or the handling, transportation, and storage of bulk materials.

Monitoring of this requirement shall consist of an annual certification that signs prohibiting general public access are posted at the facility.

[18 AAC 50.040(e), 7/2/2000; 18 AAC 50.045(d) & 18 AAC 50.350(d)(1), 1/18/97]

- 17. Stack Injection.** The Permittee shall not release materials other than process emissions, products of combustion, or materials introduced to control pollutant emissions from a stack at a source constructed or modified after November 1, 1982, unless approved in writing by the department.

[18 AAC 50.055(g) & 18 AAC 50.310(m), 1/18/97]

- 18. Open Burning.** The Permittee shall not conduct open burning at the facility.

[18 AAC 50.350(f)(4), 1/18/97]

- 19. Air Pollution Prohibited.** The Permittee shall not cause any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property.

[18 AAC 50.040(e), 7/2/2000; 18 AAC 50.110, 5/26/72; & 18 AAC 50.350(d)(1), 1/18/97]

- 19.1** Within 24 hours of receiving a complaint that is attributable to emissions from the facility, investigate the complaint and

- 19.2 Within 48 hours time initiate necessary corrective actions to alleviate or eliminate the cause of the complaint.

[18 AAC 50.240(c) & 18 AAC 50.350(g), 1/18/97]

- 19.3 Keep records of the date, time, and nature of all complaints received and summary of the investigation and corrective actions undertaken for complaints attributable to emissions from the facility. Upon request of the department, submit copies of the records.

[18 AAC 50.350(h)-(i), 1/18/97]

- 20. Technology-Based Emission Standard.** If an unavoidable emergency, malfunction, or non-routine repair, as defined in 18 AAC 50.235, causes emissions in excess of a technology-based emission standard listed in condition 13, the Permittee shall take all reasonable steps to minimize levels of emissions that exceed the standard.

[18 AAC 50.235(a) & 18 AAC 50.350(f), 1/18/97]

- 21. Permit Renewal.** To renew this permit, the Permittee shall submit a complete application under 18 AAC 50.335 no sooner than **March 6, 2005** and no later than **March 6, 2006** to renew this permit.

[18 AAC 50.335(a), 1/18/97]

Section 9. General Source Testing and Monitoring Requirements

- 22. Requested Source Tests.** In addition to any source testing explicitly required by this permit, the Permittee shall conduct source testing as requested by the department to determine compliance with applicable permit requirements.

[18 AAC 50.220(a), 18 AAC 50.345(a)(10), 1/18/97]

- 23. Operating Conditions.** Unless otherwise specified by an applicable requirement or test method, the Permittee shall conduct source testing:

23.1 At a point or points that characterize the actual discharge into the ambient air; and

23.2 At the maximum rated burning or operating capacity of the source or another rate determined by the department to characterize the actual discharge into the ambient air.

[18 AAC 50.220(b) & 18 AAC 50.350(g), 1/18/97]

- 24. Reference Test Methods.** The Permittee shall use the following as reference test methods when conducting source testing for compliance with this permit:

24.1 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(a) must be conducted in accordance with the methods and procedures specified in 40 C.F.R. 60.

[18 AAC 50.040(a), 7/2/2000; 18 AAC 50.220(c)(1)(A) & 18 AAC 50.350(g), 1/18/97]
[Federal Citation: 40 C.F.R. 60, 7/1/99]

24.2 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(b) must be conducted in accordance with the methods and procedures specified in 40 C.F.R. 61.

[18 AAC 50.040(b), 18 AAC 50.220(c)(1)(B) & 18 AAC 50.350(g), 1/18/97]
[Federal Citation: 40 C.F.R. 61, 7/1/97]

24.3 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(c) must be conducted in accordance with the source test methods and procedures specified in 40 C.F.R. 63.

[18 AAC 50.040(c), 18 AAC 50.220(c)(1)(C) & 18 AAC 50.350(g), 1/18/97]
[Federal Citation: 40 C.F.R. 63, 7/1/97]

24.4 Source testing for the reduction in visibility through the exhaust effluent must be conducted in accordance with the procedures set out in Section 14.

[18 AAC 50.030, 18 AAC 50.220(c)(1)(D) & 18 AAC 50.350(g), 1/18/97]

24.5 Source testing for emissions of particulate matter, sulfur compounds, nitrogen compounds, carbon monoxide, lead, volatile organic compounds, fluorides, sulfuric acid mist, municipal waste combustor organics, metals, and acid gases must be conducted in accordance with the methods and procedures specified 40 C.F.R. 60, Appendix A.

[18 AAC 50.040(a)(4), 18 AAC 50.220(c)(1)(E) & 18 AAC 50.350(g), 1/18/97]
[Federal Citation: 40 C.F.R. 60, Appendix A, 7/1/99]

24.6 Source testing for emissions of PM-10 must be conducted in accordance with the procedures specified in 40 C.F.R. 51, Appendix M.

[18 AAC 50.035, 18 AAC 50.220(c)(1)(F) & 18 AAC 50.350(g), 1/18/97]
[Federal Citation: 40 C.F.R. 51, Appendix M, 12/19/96]

24.7 Source testing for emissions of any contaminant may be determined using an alternative method approved by the department in accordance with Method 301 in Appendix A to 40 C.F.R. 63.

[18 AAC 50.040(c), 7/2/00; 18 AAC 50.220(c)(2) & 18 AAC 50.350(g), 1/18/97]
[Federal Citation: 40 C.F.R. 63, Appendix A, Method 301, 7/1/99]

25. Excess Air Requirements. To determine compliance with this permit, standard exhaust gas volumes must only include the volume of gases formed from the theoretical combustion of fuel, plus the excess air volume normal for the specific source type, corrected to standard conditions (dry gas at 70° F and an absolute pressure of 760 millimeters of mercury).

[18 AAC 50.220(c)(3), 18 AAC 50.350(g) & 18 AAC 50.990(88), 1/18/97]

26. Test Plans. Before conducting any source tests, the Permittee shall submit a plan to the Department. The plan must include the methods and procedures to be used for sampling, testing, and quality assurance, and must specify how the source will operate during the test and how the Permittee will document this operation. A complete plan must be submitted within 60 days of receiving a request under condition 22 and at least 30 days before the scheduled date of any tests.

[18 AAC 50.345(a)(10), 18 AAC 50.350(b)(3) & 18 AAC 50.350(g), 1/18/97]

27. Test Notification. At least 10 days before conducting a source test, the Permittee shall give the Department written notice of the date and time the source test will begin.

[18 AAC 50.345(a)(10) & 18 AAC 50.350(b)(3), 1/18/97]

28. Test Reports. Within 45 days after completing a source test, the Permittee shall submit two copies of the results, to the extent practical, in the format set out in the *Source Test Report Outline* of Volume III, Section IV.3 of the State Air Quality Control Plan, adopted by reference in 18 AAC 50.030(8). The Permittee shall certify the results as set out in condition 30.

[18 AAC 50.345(a)(10), 18 AAC 50.350(b)(3) & 18 AAC 50.350(h) – (i), 1/18/97]

29. Particulate Matter Calculations. In source testing for compliance with the particulate matter standards in conditions 5 and 9 the three-hour average is determined using the average of three one-hour test runs.

[18 AAC 50.220(f) & 18 AAC 50.350(g), 1/18/97]

Section 10. General Recordkeeping, Reporting, and Compliance Certification Requirements

- 30. Certification.** The Permittee shall certify all reports, compliance certifications, or other documents submitted to the department under this permit by including the signature of a responsible official for the permitted facility following the statement: "Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete." For the same six-month reporting period, the excess emission and permit deviation reports submitted under condition 34 may be certified with the facility operating report required by condition 35. All other reports must be certified upon submittal.

[18 AAC 50.205, 18 AAC 50.345(a)(9), 18 AAC 50.350(b)(3) & 18 AAC 50.350(i) 1/18/97]

- 31. Submittals.** Unless otherwise directed by the department or this permit, the Permittee shall send reports, compliance certifications, and other documents required by this permit to ADEC, Air Permits Program, 610 University Ave., Fairbanks, AK 99709-3643, ATTN: Compliance Technician.

[18 AAC 50.350(i), 1/18/97]

- 32. Information Requests.** The Permittee shall furnish to the department, within a reasonable time, any information the department requests in writing to determine whether cause exists to modify, revoke and reissue, or terminate the permit or to determine compliance with the permit. Upon request, the Permittee shall furnish to the department copies of records required by this permit. The department, in its discretion, will require the Permittee to furnish copies of those records directly to the federal administrator.

[18 AAC 50.200, 18 AAC 50.345(a)(8), 18 AAC 50.350(b)(3) & 18 AAC 50.350(g) – (i), 1/18/97]

- 33. Recordkeeping Requirements.** The Permittee shall keep all records required by this permit for at least five years after the date of collection, including:

33.1 Copies of all reports and certifications submitted pursuant to this section of the permit.

33.2 Records of all monitoring required by this permit, and information about the monitoring including

- a. calibration and maintenance records, original strip chart or computer-based recordings for continuous monitoring instrumentation;
- b. sampling dates and times of sampling and measurements;
- c. the operating conditions that existed at the time of sampling or measurement;
- d. the date analyses were performed;
- e. the location where samples were taken;
- f. the company or entity that performed the sampling and analyses;

- g. the analytical techniques or methods used in the analyses; and
- h. the results of the analyses.

[18 AAC 50.350(h), 1/18/97]

- 34. Excess Emission and Permit Deviation Reports.** The Permittee shall report all emissions or operations that exceed or deviate from the requirements of this permit or that present a potential threat to human health or safety as soon as possible, but no later than 48 hours, after discovery of the event. The report must include the information listed on the form contained in Section 16. The Permittee may use this form to report emissions under this condition.

[18 AAC 50.235(a)(2), 18 AAC 50.240(c) & 18 AAC 50.350(i), 1/18/97]

- 35. NSPS and NESHAP Reports.** The Permittee shall submit to the Department copies of reports required by condition 12 as they apply to the facility as follows:

35.1 Copies of any NSPS and NESHAP reports submitted to the U.S. Environmental Protection Agency (EPA) Region 10 shall be attached to the facility operating report required by condition 36.

35.2 The Permittee shall notify the department and provide a written copy of any EPA granted waiver of the federal emission standards, record keeping, monitoring, performance testing, or reporting requirements, or approved custom monitoring schedules within 30 days after receipt of a waiver or schedule. Keep a copy of each EPA issued monitoring waiver or custom monitoring schedule with the permit at the facility.

[18 AAC 50.040, 7/2/00 & 18 AAC 350(i)(2), 1/18/97]

[Federal Citation 40 C.F.R. 60, 40 C.F.R. 61 & 40 C.F.R. 63, 7/1/99]

- 36. Facility Operating Reports.** During the life of this permit, the Permittee shall submit an original and two copies of an operating report by August 1 for the period January 1 to June 30 and by February 1 for the period July 1 to December 31. Facility operating reports must include copies of the records required by the conditions of this permit. In addition, facility operating reports must include a listing of all excess emissions and permit deviations that occurred during the reporting period and must identify:

36.1 the date of the deviation;

36.2 the equipment involved;

36.3 the permit condition;

36.4 a description of the deviation; and

36.5 any corrective action or preventive measures taken and the date of such actions.

[18 AAC 50.350(d)(4), 18 AAC 50.350(f)(3) & 18 AAC 50.350(i), 1/18/97]

- 37. Annual Compliance Certification.** Each year no later than **October 7**, the Permittee shall compile and submit to the department an original and two copies of an annual compliance certification report as follows:

- 37.1 For each permit term and condition set forth in Section 3 through Section 13, including terms and conditions for monitoring, reporting, and recordkeeping:
- a. certify the compliance status over the preceding calendar year consistent with the monitoring required by this permit;
 - b. state whether compliance is intermittent or continuous; and
 - c. briefly describe each method used to determine the compliance status.
- 37.2 Submit a copy of the report directly to the U.S. EPA-Region 10, Office of Air Quality, M/S OAQ-107, 1200 Sixth Avenue, Seattle, WA 98101.

[18 AAC 50.350 (d)(4) & 18 AAC 50.350(j), 1/18/97]

Section 11. Standard Conditions Not Otherwise Included in the Permit

- 38.** Consistent with Alaska law, for purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any standard in this permit, nothing in this permit precludes the use of any credible evidence or information relevant to whether the facility would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. If this condition applies to an NSPS source, then the requirements of 40 C.F.R. 60.11(g) as adopted in 18 AAC 50.040(a)(1) also apply.

[18 AAC 50.350(f)(3), 1/18/97]

- 39.** The Permittee must comply with each permit term and condition. Noncompliance constitutes a violation of AS 46.14, 18 AAC 50, and the Clean Air Act, except for those requirements designated as not federally-enforceable, and is grounds for:

39.1 an enforcement action,

39.2 permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280, or

39.3 denial of an operating-permit renewal application.

[18 AAC 50.345(a)(1) & 18 AAC 50.350(b)(3), 1/18/97]

- 40.** It is not a defense in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with a permit term or condition.

[18 AAC 50.345(a)(2) & 18 AAC 50.350(b)(3), 1/18/97]

- 41.** Each permit term and condition is independent of the permit as a whole and remains valid regardless of a challenge to any other part of this permit.

[18 AAC 50.345(a)(3) & 18 AAC 50.350(b)(3), 1/18/97]

- 42.** Compliance with permit terms and conditions is considered to be compliance with those requirements that are:

42.1 included and specifically identified in the permit, or

42.2 determined in writing in the permit to be inapplicable.

[18 AAC 50.345(a)(4) & 18 AAC 50.350(b)(3), 1/18/97]

- 43.** The permit may be modified, reopened, revoked and reissued, or terminated for cause. A request by the Permittee for modification, revocation and reissuance, or termination or a notification of planned changes or anticipated noncompliance does not stay any operating permit condition.

[18 AAC 50.345(a)(5) & 18 AAC 50.350(b)(3), 1/18/97]

- 44.** The permit does not convey any property rights of any sort, nor any exclusive privilege.

[18 AAC 50.345(a)(6) & 18 AAC 50.350(b)(3), 1/18/97]

45. The Permittee shall allow an officer or employee of the department or an inspector authorized by the department, upon presentation of credentials and at reasonable times with the consent of the owner or operator, to:

- 45.1 enter upon the premises where a source subject to the operating permit is located or where records required by the permit are kept,
- 45.2 have access to and copy any records required by the permit,
- 45.3 inspect any facilities, equipment, practices, or operations regulated by or referenced in the permit, and
- 45.4 sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements.

[18 AAC 50.345(a)(7) & 18 AAC 50.350(b)(3), 1/18/97]

Section 12. *Permit As Shield from Inapplicable Requirements*

In accordance with AS 46.14.290, this section of the permit contains the requirements determined by the department not to be applicable to the permitted facility.

- 46.** The department has determined that Source IDs 1–2 are not subject to the requirements set forth in 40 C.F.R. 60 Subpart GG. This determination is based upon certification by the Permittee that Source IDs 1–2 were installed prior to the applicability date of Subpart GG.

[18 AAC 50.350(l), 1/18/97]

- 47.** The department has determined that fuel storage tank C-GT34 is not subject to the requirements set forth in 40 C.F.R. 60 Subparts K, Ka and Kb. This determination is based upon certification by the Permittee that this tank was installed prior to the applicability dates of Subparts K, Ka and Kb.

[18 AAC 50.350(l), 1/18/97]

- 48.** The department has determined that the facility is not subject to the requirements set forth in 40 C.F.R. 63. This determination is based upon certification by the Permittee that none of the specified activities are performed at the facility.

[18 AAC 50.350(l), 1/18/97]

Section 13. Visible Emissions and Particulate Matter Monitoring Plan

Visible Emissions Observations for Liquid Fuel and Natural Gas Fired Source IDs 1-16

49. Except as provided in Table 3, the Permittee shall observe the exhaust of Source IDs 1–16 for visible emissions using **either** the Method-9 Plan **or** the Smoke/No-Smoke Plan. The Permittee may change visible-emission plans for a source at any time. Upon permit issuance start visible emissions monitoring with the **Initial Monitoring Frequency**.

Table 3 Visual Observation Methods

	Method-9 Plan	Smoke/No Smoke Plan
Initial Monitoring Frequency	<p>Within six months after the issue date of this permit or within seven calendar days after changing from the Smoke/No-Smoke Plan), whichever is later, and at least monthly (semiannually for pipeline quality natural gas fired sources) that a source operates thereafter, observe its exhaust for six minutes to obtain 24 individual 15-second opacity readings in accordance with Section 14.</p> <ul style="list-style-type: none"> • If two or more individual 15-second readings during the six-minute observation period are greater than 20% opacity, then continue the Method-9 observations for an additional 12 minutes for a total of 18 minutes. • If four or more individual 15-second readings during the 18-minute observation period are greater than 20% opacity, then continue the Method-9 observations for an additional 42 minutes for a total of 60 minutes. 	<p>During each calendar day (quarterly for pipeline quality natural gas fired sources) that a source operates, observe the exhaust for the presence or absence of visible emissions, excluding condensed water vapor. Record the following information in a written log for each observation and submit copies of the records upon request of the department:</p> <ul style="list-style-type: none"> • the date and time of the observation; • from Table 1 of this permit, the ID of the source observed; • whether visible emissions are present or absent in the exhaust; • if the source starts operation on the day of the observation, the startup time of the source; and • name and title of the person making the observation.

	Method-9 Plan	Smoke/No Smoke Plan
Reduced Monitoring Frequency	If 60 minutes of observations were not necessary under the Initial Monitoring Frequency, or the source was observed for 60 minutes and no more than eight individual 15-second readings are greater than 20% opacity during the most recent observation, then reduce the number of six-minute observations to one observation for every quarter (no reduction for pipeline quality natural gas fired sources) that a source operates.	If the source operated without visible smoke in the exhaust during the most recent month, then reduce the number of Smoke/No-Smoke observations to one observation for every month (no reduction for pipeline quality natural gas fired sources) that a source operates.
Increased Monitoring Frequency	If a source is observed for 60 minutes and more than eight, but fewer than thirteen individual 15-second readings are greater than 20% opacity during the most recent observation, then increase the observation frequency to, or maintain at, monthly intervals, until the criterion for reduced monitoring frequency specified above are met.	No increased frequency. Go to condition 51 or to the Initial Monitoring Frequency of the Method-9 Plan.

[18 AAC 50.350(g) – (i), 1/18/97]

- 50.** The Permittee is not required to comply with conditions 26, 27 and 28 (Test Plans, Test Notifications and Test Reports) when the exhaust is observed for visible emissions under condition 49.

[18 AAC 50.350(g) – (i), 1/18/97]

Corrective Actions Based on Smoke/No Smoke Observations

- 51.** If under the Smoke/No Smoke Plan visible emissions are present in the exhaust during an observation performed under condition 49, then the Permittee shall:
- 51.1 Initiate actions to eliminate smoke from the source within 24 hours of the observation;
 - 51.2 Keep a written record of the starting date, the completion date, and a description of the actions taken to reduce smoke;
 - 51.3 After completing the actions, take smoke/no-smoke readings in accordance with condition 49 at a frequency of at least once per day for the next 30 calendar days (for both liquid and gas fired sources) that the source operates. Continue according to the optional schedule set out in condition 49 and

- 51.4 If the actions taken under condition 51.1 do not eliminate the smoke, or if subsequent smoke is observed under the schedule set out in condition 51.3, then observe the exhaust in accordance with the Method-9 Plan until written approval has been received from the department to resume observations under the Smoke/No-Smoke Plan.

[18 AAC 50.350(g) – (i), 1/18/97]

Particulate Matter Testing (Source IDs 1–16)

52. The Permittee shall conduct tests to determine the concentration of particulate matter(PM) in the exhaust of a source as follows:

- 52.1 Conduct a particulate matter source test according to the requirements set out in Section 9 no later than 90 calendar days after any time either of the following occurs, unless a follow-up Method-9 test during the 90 days shows that the following no longer occurs:

- a. A 60-minute visible emission observation results in 13 or more 15-second readings with an opacity greater than 20%; or
- b. A 60-minute visible emission observation results in an average opacity that is greater than 12% for a source with an exhaust stack diameter that is less than 21 inches.

- 52.2 During each PM source test, observe the exhaust for 60 minutes in accordance with Section 14 and submit a summary of these observations with the source test report.

[18 AAC 50.350(g) – (i), 1/18/97]

Reporting Requirements

53. The Permittee shall, within 180 calendar days after the effective date of this permit, record and report the exhaust stack diameter of each Source IDs 1–16 and report this information to the department with the first or second facility operating report required by condition 36.

[18 AAC 50.350(g) – (i), 1/18/97]

54. The Permittee shall notify the department in each facility operating report required by condition 36 which visible-emission plan in condition 49 was used for each source. The Permittee shall also submit with the facility operating report copies of the observation results (i.e. opacity readings) for each source that used the Method-9 Plan. The Permittee shall also indicate in the facility operating report the number of calendar days that smoke was observed for each source that used the Smoke/No-Smoke Plan.

[18 AAC 50.350(g) – (i), 1/18/97]

55. Report under condition 34 if:

- 55.1 a 60 minute visible emission observation results in

- a. 13 or more 15-seconds readings with an opacity greater than 20%;

- b. except for sources using natural gas, a 60-minute average opacity that is greater than 12% for a source with an exhaust stack diameter that is less than 21 inches; or

55.2 the results of a test for particulate matter exceed the particulate matter emission limit.

[18 AAC 50.350(g) – (i), 1/18/97]

Visible Emissions Observations for Flares (Source ID 16)

- 56.** Within 3 daylight hours of the time when the vapor recovery unit (VRU) goes out of service, observe the flare for the presence or absence of visible emissions. If visible emissions are present in the exhaust, take corrective action within 24 hours, and make another observation upon completing the corrective action. If visible emissions remain present in the exhaust, conduct a daily Method-9 observation of the source beginning no later than 5 days after completion of the corrective action, and continuing until the VRU is restored to service.

[18 AAC 50.350(g) – (i), 1/18/97]

- 57.** Record the following information in a written log for each VRU outage, and submit copies of the log upon request of the department:

- a. Starting and ending times of each VRU outage;
- b. Date and time of each visible emissions observation performed;
- c. Whether visible emissions are present or absent in the exhaust;
- d. Date, time and nature of any corrective action taken to reduce visible emissions
- e. Date, time and result of any Method-9 tests performed
- f. Name, title and signature of the person making the observation(s).
- g. Name, title and signature of the person making the observation(s).

[18 AAC 50.350(g) – (i), 1/18/97]

Section 14. Visible Emission Evaluation Procedures

An observer qualified according to 40 C.F.R. 60, RM 9 shall use the following procedures to determine the reduction of visibility through the exhaust effluent.

Position. The qualified observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented in the 140° sector to his back. Consistent with maintaining the above requirement, the observer shall to the extent possible, make his observations from a position such that his line of vision is approximately perpendicular to the plume direction and, when observing opacity of emissions from rectangular outlets (e.g., roof monitors, open baghouses, noncircular stacks), approximately perpendicular to the longer axis of the outlet. The observer's line of sight should not include more than one plume at a time when multiple stacks are involved, and in any case the observer should make his observations with his line of sight perpendicular to the longer axis of such a set of multiple stacks (e.g., stub stacks on baghouses).

Field Records. The observer shall record the name of the plant, emission location, facility type, observer's name and affiliation, and the date on the Visible Emissions Field Data Sheet. The time, estimated distance to the emission location, approximate wind direction, estimated wind speed, description of the sky condition (presence and color of clouds), and plume background are recorded on the sheet at the time opacity readings are initiated and completed.

Observations. Opacity observations shall be made at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. The observer shall not look continuously at the plume but instead shall observe the plume momentarily at 15-second intervals. Unless directed to do otherwise in this permit, observe emissions for 60 consecutive minutes to obtain a minimum of 240 observations.

Attached Steam Plumes. When condensed water vapor is present within the plume as it emerges from the emission outlet, opacity observations shall be made beyond the point in the plume at which condensed water vapor is no longer visible. The observer shall record the approximate distance from the emission outlet to the point in the plume at which the observations are made.

Detached Steam Plume. When water vapor in the plume condenses and becomes visible at a distinct distance from the emission outlet, the opacity of emissions should be evaluated at the emission outlet prior to the condensation of water vapor and the formation of the steam plume.

Recording Observations. Opacity observations shall be recorded to the nearest 5 percent at 15-second intervals on the Visible Emissions Observation Record contained in this section. Record the minimum number of observations required by the permit. Each momentary observation recorded shall be deemed to represent the average opacity of emissions for a 15-second period.

Data Reduction. To determine compliance with a standard set out in conditions 4 and 8 count the number of observations that exceed 20 percent opacity and record this number on the sheet.

XTO Energy Inc.
 Permit No. 85TVP01
Visible Emissions Field Data Sheet

09/07/01
 Page 27 of 30

Certified Observer: _____

Company: _____

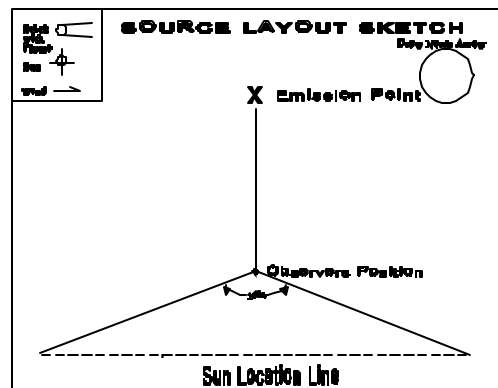
Location: _____

Test No.: _____ **Date:** _____

Source: _____

**Production Rate, Operating Rate &
 Unit Operating Hours:** _____

Hrs. of observation: _____



Clock Time	Initial				Final
Observer location					
Distance to discharge					
Direction from discharge					
Height of observer point					
Background description					
Weather conditions					
Wind Direction					
Wind speed					
Ambient Temperature					
Relative humidity					
Sky conditions: (clear, overcast, % clouds, etc.)					
Plume description:					
Color					
Distance visible					
Water droplet plume? (Attached or detached?)					
Other information					

Page ____ of ____

Test Number _____ Clock time _____

[illegible]

Observer Signature

Duration of Observation Period (minutes) _____
 Number of Observations _____
 Number of Observations exceeding 20% _____

Set Number	Time Start—End	Opacity	
		Sum	Average

Section 15. Material Balance Calculation

If the sulfur content of a fuel shipment is greater than 0.5% by weight, calculate the three-hour exhaust concentration of SO₂ using the following equations:

$$A = 31,200 \times [\text{wt}\%S_{\text{fuel}}] = 31,200 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

$$B = 0.148 \times [\text{wt}\%S_{\text{fuel}}] = 0.148 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

$$C = 0.396 \times [\text{wt}\%C_{\text{fuel}}] = 0.396 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

$$D = 0.933 \times [\text{wt}\%H_{\text{fuel}}] = 0.933 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

$$E = B + C + D = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

$$F = 21 - [\text{vol}\%_{\text{dry}}O_{2,\text{exhaust}}] = 21 - \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

$$G = [\text{vol}\%_{\text{dry}}O_{2,\text{exhaust}}] \div F = \underline{\hspace{2cm}} \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

$$H = 1 + G = 1 + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

$$I = E \times H = \underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

$$\text{SO}_2 \text{ concentration} = A \div I = \underline{\hspace{2cm}} \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \text{ PPM}$$

The **wt%S_{fuel}**, **wt%C_{fuel}**, and **wt%H_{fuel}** are equal to the weight percents of sulfur, carbon, and hydrogen in the fuel. These percentages should total 100%.

The fuel weight percent (wt%) of sulfur is obtained pursuant to condition 6.1a. The fuel weight percents of carbon and hydrogen are obtained from the fuel refiner.

The volume percent of oxygen in the exhaust (**vol%_{dry}O_{2,exhaust}**) is obtained from oxygen meters, manufacturer's data, or from the most recent ORSAT analysis at the same engine load used in the calculation.

Enter all of the data in percentages without dividing the percentages by 100. For example, if **wt%S_{fuel}** = 1.0%, then enter 1.0 into the equations not 0.01 and if **vol%_{dry}O_{2,exhaust}** = 3.00%, then enter 3.00, not 0.03.

[18 AAC 50.350(g), 1/18/97]

Section 16. ADEC Notification Form

Fax this form to: (907) 269-7508 Telephone: (907) 269-8888

XTO Energy Inc.
Company Name

Platform C
Facility Name

1. Reason for notification:

☐ **Excess Emission** ☐ **Permit Condition Deviation**

2. Event Information (Use 24-hour clock):

	START Time: (hr:min):	END Time:	Duration
Date: _____	_____:	_____:	_____:
Date: _____	_____:	_____:	_____:
		Total:	_____:

3. Cause of Event (Check all that apply):

☐ START UP ☐ UPSET CONDITION ☐ CONTROL EQUIPMENT
☐ SHUT DOWN ☐ SCHEDULED MAINTENANCE ☐ OTHER _____

Attach a detailed description of what happened, including the parameters or operating conditions exceeded.

4. Sources Involved:

Identify each Emission Source involved in the event, using the same identification number and name as in the Permit. List any Control Device or Monitoring System affected by the event. Attach additional sheets as necessary.

Source ID No.	Source Name	Description	Control Device
_____	_____	_____	_____
_____	_____	_____	_____

5. Emission Limit and/or Permit Condition Deviation:

Identify each Emission Standard and Permit Condition exceeded during the event. Attach a list of ALL known or suspected injuries or health impacts. Attach additional sheets as necessary.

Permit Condition	Limit	Exceedence
_____	_____	_____
_____	_____	_____

6. Emission Reduction:

Attach a detailed description of the measures taken to minimize and/or control emissions or permit deviations during the event.

7. Corrective Actions:

Attach a detailed description of corrective actions taken to restore the system to normal operation and to minimize or eliminate chances of a recurrence.

Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.

Printed Name: _____

Signature: _____

Date: _____

Alaska Department of Environmental Conservation

Air Permits Program

April 3, 2001

XTO Energy Inc.

Platform C

LEGAL AND FACTUAL BASIS

for the terms and conditions of

Permit No. 85TVP01

Prepared by –Scott Bailey

INTRODUCTION

This document sets forth the legal and factual basis for the terms and conditions of Operating Permit No. 85TVP01.

Platform C is an offshore crude oil and gas production platform located 5 miles from the East Forelands in Cook Inlet. The facility is owned and operated by XTO EnergyOil Company. XTO Energy Inc. is the Permittee for the facility's operating permit.

PROCESS DESCRIPTION

The facility consists of a production platform that produces crude oil, produced water and some natural gas from several wells at each location. The oil and produced water is shipped to XTO Energy onshore facility where it is processed. The recovered natural gas is utilized as fuel gas for various engines. The normal platform operations include those activities associated with the production of oil as well as operation, maintenance and monitoring of associated equipment.

As provided in the application, the facility consists of two gas-fired turbines, five gas engines, eight diesel-generators/engines and a gas-fired flare that were installed prior to 1973. A new gas engine, Source ID 5, and a new diesel powered crane engine, Source ID 12 were added in 1999 and 2000 respectively.

SOURCE INVENTORY AND DESCRIPTION

Section 4 of Operating Permit No. 85TVP01 contains Table 1 describing the sources regulated by the permit. The table is provided for information and identification purposes only. Specifically, the source rating/size provided in the table is not intended to create an enforceable limit.

EMISSIONS

Table 1. Emissions Summary

Pollutant	NO _x	CO	PM-10	SO ₂	VOC
Potential Emissions (TPY) per AS 46.14.990(21)	958	373	33	103	50
Revised Equipment, Title V Assessable Emissions (TPY) per AS 46.14.250(h)	958	373	33	103	50

The potential emissions listed in Table 1 were calculated by the department and are based on AP-42 emission factors, submitted by XTO Energy in January 1998 and December 2000. New AP-42 factors from July 2000 were used to calculate emissions from Source IDs 5 and 12.

The assessable potential to emit is simply those regulated air contaminants for which the facility has the potential to emit quantities greater than 10 tons per year

XTO Energy requested a change in the operating period for Source ID No. 7 to 8,760 hrs/yr from 730 hrs/yr in a letter dated December 20, 2000. The Title V application for Platform C included Owner Requested Limits of 1,460 hr/yr for Source IDs No.12 and 13. The Emergency Light & Water Pump, Source ID No. 14 includes an Owner Requested Limit of 52 hr/yr making the Emergency Light & Water Pump an insignificant emission source. The Emergency Fire Water Pump, Source ID No. 15 includes an Owner Requested Limit of 6 hr/yr making the Emergency Fire Water Pump an insignificant emission source.

BASIS FOR REQUIRING AN OPERATING PERMIT

Platform C requires an operating permit because it has the potential to emit 100 tons per year (tpy) or more of a regulated air contaminant. Platform C meets the definition of operating permit facility in the state regulations under Section 2. Platform C is also a Prevention of Significant Deterioration (PSD) Major Facility as defined in 18 AAC 50.300(c)(1) because it has the potential to emit more than 250 tpy of a regulated air contaminant in an area classified as attainment or unclassifiable. Platform C has never undergone a PSD review because the facility was in full operation before 1977.

The facility was modified after August 8, 1980. There was a "like-kind" replacement of Source ID 8 during 1987. This replacement was authorized by department policy in place at the time. There was a "like-kind" replacement of Source ID 10 during 1987. This replacement was authorized by department policy in place at the time. There was a "like-kind" replacement of Source ID 11 during 1987. This replacement was authorized by department policy in place at the time. There was a "like-kind" replacement of Source ID 5 during 1999. This replacement was authorized by department policy in place at the time. There was a "like-kind" replacement of Source ID 12 during 2000. This replacement was authorized by department policy in place at the time. Source IDs 12-15 operate with Owner Requested Limits on operating hours.

Alaska regulations require operating permit applications to include identification of "regulated sources." As applied to Platform C, the state regulations require a description of:

Each incinerator, including a demonstration showing each requirement in 18 AAC 50.050, Incinerator Emissions Standards, that applies [18 AAC 50.335(e)(4)(A)];

Each source regulated by a standard in 18 AAC 50.055, Industrial Processes and Fuel Burning Equipment [18 AAC 50.335(e)(4)(C)];

Each source subject to a standard adopted by reference in 18 AAC 50.040 [18 AAC 50.335(e)(2)]; and

Sources subject to requirements in an existing DEC permit [18 AAC 50.335(e)(5)]

The emission sources at Platform C classified as "regulated sources" according to the above DEC regulations are listed in Table 1 of Permit No. 85TVP01.

CURRENT AIR QUALITY PERMITS

Previous Air Quality Permit to Operate

No previous air quality control permit-to-operate currently exists for this facility.

Construction Permits

No construction permits have been issued for this facility after January 18, 1997 (the effective date of the new divided operating and construction-permitting program).

Title-V Operating Permit Application History

The previous owner, Shell Western E & P Inc., submitted a Title V application on October 9, 1997. The application was determined to be complete on January 8, 1998.

Additional information was received, after the transfer of ownership from Shell Western E & P to XTO Energy, from October 20, 1999 through December 20, 2000.

COMPLIANCE HISTORY

The facility has operated at its current location since 1965. The department in the early 1980's canceled a previous Air Quality Permit to Operate. A change in air regulations removed the need to obtain an operating permit for facilities not categorized as a PSD major facility. Source IDs 12–15 operate with Owner Requested Limits to avoid triggering the 40 tpy NO_x PSD threshold.

LEGAL AND FACTUAL BASIS FOR THE PERMIT CONDITIONS

Conditions 1 - 3

Legal Basis: [18 AAC 50.350(c) & 18 AAC 50.400 – 420, 1/18/97]

The regulations require all permits to include due dates for the payment of fees and any method the Permittee may use to re-compute assessable emissions.

Factual Basis: These conditions require the Permittee to pay fees in accordance with the department's billing regulations. The department's billing regulations set the due dates for payment of fees based on the billing date.

The conditions also set forth how the Permittee may recompute assessable emissions. If the Permittee does not choose to annually calculate assessable emissions, emissions fees may be paid based on “potential to emit.”

The potential to emit is based on AP-42 (5/98) factors for sulfur dioxide, carbon monoxide, nitrogen oxides, particulate matter and volatile organic compounds. Emissions are based on owner requested limits on Source IDs 12, 13, 14 and 15.

Condition 4

Legal Basis: [18 AAC 50.055(a)(1), 1/18/97; 18 AAC 50.350(d), 6/21/98;
18 AAC 50.350(g)–(i), 1/18/97]

The condition applies to turbines, gas engines, diesel engines and a gas-fired flare because they are fuel-burning equipment.

Factual basis: The condition cites the state visible emission standard applicable to fuel-burning equipment. The Permittee shall not cause or allow fuel-burning equipment to violate this standard.

The monitoring, recordkeeping, and reporting requirements are listed in Section 13 of the permit. The requirements for the visible emission and particulate matter standards are combined in this section.

There are two options for monitoring visible emissions. One option requires the Permittee to observe visible emissions in accordance with the state reference test method. The other option requires the Permittee to momentarily observe the exhaust for presence or absence of visible emissions. This latter option takes into account the difficulty and expense of getting certified readers to remote locations in Alaska.

Under the latter option, all sources are initially observed for the presence or absence of smoke in the exhaust for each of the first 30 operating days (every calendar week for natural gas, except for flares). Smoke is presumed to be absent if the exhaust exhibits less than about five percent opacity. The department believes the initial 30 days (20 weeks for natural gas, except for flares) is sufficient to capture all operating modes and to assure that the monitoring determines if the source complies with the visible emission standard. If smoke is absent during any 30 day operating period (20 operating weeks for natural gas, except for flares), then the monitoring frequency is relaxed to one observation for every 30 days (20 weeks for natural gas, except for flares) that a source operates. The department believes checks every 20 weeks for natural gas fired sources, except for flares, are sufficient to monitor for the presence of increased visible emissions that may result from startup, shutdown or degradation of a source. For other sources the department believes monthly checks are sufficient to monitor for the presence of increased visible emissions that may result from degradation.

EPA, in its Region 7 Policy on Periodic Monitoring for Opacity, indicated that little or no opacity problems are expected with the use of natural gas fuel and that opacity might be high during startup, shutdown, or malfunction. Therefore, the department has lessened the frequency of opacity readings for natural gas fueled equipment. The department has also specified a preference that concentrated the readings to startup and shutdown periods.

If the Permittee observes smoke in the exhaust during the initial 30 operating days or during a monthly check, the Permittee must take action to reduce visible emissions from the source within 24 hours of the observation. After completing the action, the Permittee continues to observe the exhaust for the presence or absence of visible emissions for another 30 operating days. If smoke is observed during this 30-day period, the Permittee must observe visible emissions using the state reference test method within seven days after the visible emissions are observed.

The recordkeeping requirements consist of keeping records of the results of all visible emission observations and records of any actions taken to reduce visible emissions. In the facility operating reports, the Permittee must include copies of all observations made using the state reference test method. The Permittee must report emissions in excess of the state visible emission standard and deviations from permit conditions.

Condition 5

Legal Basis: [18 AAC 50.055(b)(1), 1/18/97; 18 AAC 50.350(d), 6/21/98;
18 AAC 50.350(g) – (i), 1/18/97]

The condition applies to turbines, gas engines, and diesel engines because they are fuel-burning equipment.

Factual basis: The condition cites the state particulate-matter emission standard applicable to fuel-burning equipment. The Permittee shall not cause or allow fuel-burning equipment to violate this standard.

The monitoring, recordkeeping, and reporting requirements are listed in Section 13 of the permit. The requirements for the visible emission and particulate matter standards are combined in this section.

The requirement to test for particulate matter to determine compliance with the standard is triggered by the results of observations conducted in accordance with the state reference test method. The Permittee is required to conduct tests if the results of an observation show noncompliance with visible emission standard or the average opacity indicates noncompliance with the particulate matter standard.

The department is not requiring initial tests to show compliance with the particulate matter standards. Based on manufacturers' data, the department believes that most new diesel engines comply with the particulate matter standard¹. Also, there are opacity-particulate correlations² that show emissions from diesel engines commonly used in Alaska will meet the state standard of 0.05 grains per dry standard cubic foot if the average opacity in the exhaust is less than 20 percent. The department believes this is sufficient justification to not require initial compliance testing since the Permittee certified compliance with the visible emission standard in the application. However, the department is requiring testing if the Permittee observes visible emissions greater than the state standard.

In a general operating permit for diesel engines, the department required source tests for particulate matter when the average opacity of a visible emission observation exceeded twelve percent. Since that time, the department has uncovered additional test data and literature that supports a statement that diesel engines will meet the 0.05 grain loading standard when the average opacity is less than twelve percent, provided that the exhaust outlet diameter (path length for opacity observations) exceeds 21 inches. Testing conducted at both an Alaskan power plant and an Hawaiian utility confirm that compliance with the 20 percent opacity standard will insure compliance with the 0.05 gr./dscf particulate standard, provided that the exhaust outlet is 21 inches or larger. This test data closely agrees with values obtained using the smoke density calculator at

¹ See attached data

² See attached graph

<http://www.dieselnet.com/calculator/index.html>. The calculator is based on the report, *Particulate Matter Measurements*, DieselNet Technology Guide, Revision 1997.12. Based on this new information, the department is requiring testing if the Permittee observes visible emissions greater than 12%, expressed as a six-minute average and the stack diameter if the source is less than 21 inches. The department is also requiring the Permittee to measure visible emissions during a source test and to calculate the average opacity during the test.

The Permittee must submit copies of all source test reports and emissions in excess of the particulate matter standard.

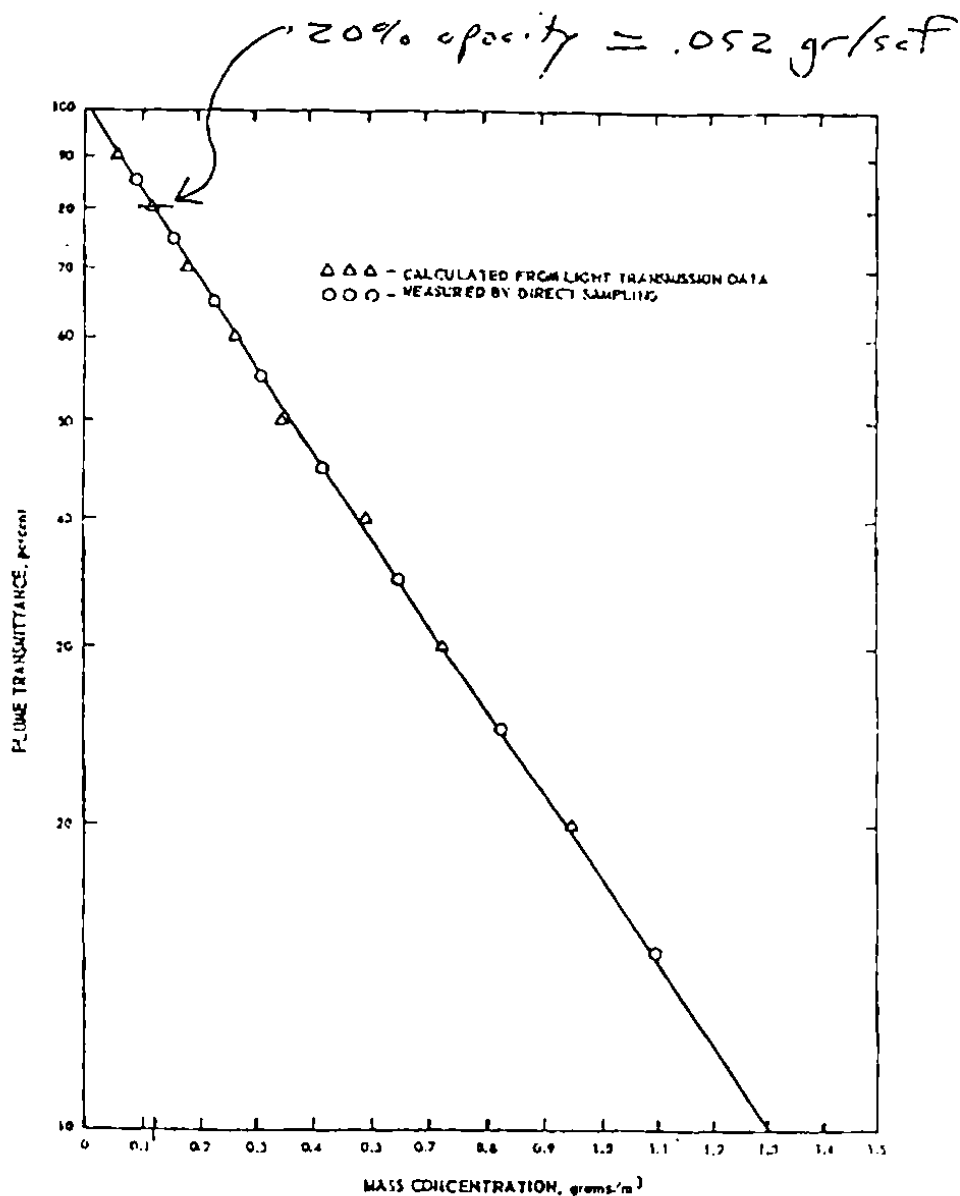


Figure 32. Mass concentration of black plume as calculated from transmittance and measured by direct sampling.

OPTICAL PROPERTIES AND VISUAL EFFECTS

Expires: September 6, 2006

The requirement to test for particulate matter to determine compliance with the standard is triggered by the results of observations conducted in accordance with the state reference test method. The Permittee is required to conduct tests if the results of an observation show noncompliance with visible emission standard or the average opacity indicates noncompliance with the particulate matter standard.

The department is not requiring initial tests to show compliance with the particulate matter standards. However, the department is requiring testing if the Permittee observes visible emissions greater than the state standard.

Condition 6

Legal Basis: [18 AAC 50.055(c), 18 AAC 50.350(g) – (i), & 18 AAC 50.410(c), 1/18/97] & [18 AAC 50.350(d), 6/21/98]

The condition applies to turbines, gas engines, and diesel engines because they are fuel-burning equipment.

Factual basis: The condition re-iterates a sulfur emission standard applicable to fuel-burning equipment. The Permittee may not cause or allow their equipment to violate this standard.

Diesel Fuel: Diesel fuel sulfur is measured in weight percent sulfur. Calculations show that fuel containing no more than 0.5% sulfur will always comply with the emission standard. This is true for all liquid hydrocarbon fuels, even with no excess air. Verification of ASTM fuel grade as No. 1 or No. 2 fuel oil will certify compliance with the standard because these fuel oils always have a fuel sulfur content of no more than 0.5%. For fuels with a sulfur content higher than 0.5%, this condition requires the Permittee to use the equations in Section 15 to calculate the exhaust gas SO₂ concentration, showing whether the standard was exceeded. The equations in Section 15 are all based on stoichiometric mass balance. The ADEC Air Permits Web Site contains the supporting calculations at

<http://www.state.ak.us/dec/dawq/aqm/newpermit.htm>

Fuel Gas: Fuel gas sulfur is measured as hydrogen sulfide, i.e. H₂S concentration in ppm by volume. Calculations show that fuel gas containing no more than 4000 ppm H₂S will always comply with this emission standard. This is true for all fuel gases, even with no excess air. The calculations supporting this assertion are posted on the ADEC Air Permits Web Site at

<http://www.state.ak.us/dec/dawq/aqm/newpermit.htm>

Equations to calculate the exhaust gas SO₂ concentrations resulting from the combustion of fuel gas were not included in this permit. Fuel gas with an H₂S concentration of even 10% of 4000 ppm is currently not available in Alaska and is not projected to be available during the life of this permit.

SO₂ Potential to Emit (PTE): The SO₂ PTE is based on 0.5% by weight sulfur of the diesel fuel and 4000 ppm H₂S by volume of the fuel gas. If these fuel sulfur assumptions, i.e. 0.5% and 4000 ppm, are exceeded, then the SO₂ PTE could be exceeded depending on the hours of operation and the rate of fuel consumption. In any case, this facility will not be classified under 18 AAC 50.325(b)(1) for SO₂ at 0.5% and 4000 ppm. However, the department may, in its discretion, under the authority of 18 AAC 50.201(a) require the Permittee to evaluate

the effect of the facility's SO₂ emissions on ambient air before allowing the fuel sulfur concentration to exceed the 0.5% and 4000 ppm fuel sulfur assumptions in this permit.

Condition 7

Legal Basis: [18 AAC 50.350(e)(3) & 18 AAC 50.350(g)–(i), 1/18/97]

The condition applies because the permit includes owner-requested limits to reduce NO_x emissions to avoid classification as a PSD facility.

Factual basis: The condition meets the monitoring, recordkeeping and reporting requirements for operating hours in the Title V permit format. The Permittee included the recording of operating hours in the Title V Air Quality Operating Permit application. The replacement of Source IDs 5 and 12 triggered the PSD 40 ton NO_x increment and generated a total increase of 23.9 tons of NO_x. The Permittee requested reduced operating hours for Source IDs 12–15 to avoid classification as a PSD facility.

A Construction Permit is required if the facility increases cumulative yearly NO_x emissions more than an additional 15.1 tons.

Conditions 8 - 10

Legal Basis: [18 AAC 50.050(a)(2), 1/18/97; 18 AAC 50.055(a)(1), 1/18/97;
18 AAC 50.055(b)(1), 1/18/97 & 18 AAC 50.055(c), 1/18/97]

Factual basis: These are general emission standards which apply to all industrial processes fuel-burning equipment, and incinerators regardless of size. The conditions re-iterate the general standards and require compliance for insignificant sources. The Permittee may not cause or allow their equipment to violate these standards. Insignificant sources are not listed in the permit unless specific monitoring, recordkeeping and reporting are necessary to ensure compliance.

The department finds that the insignificant sources at this facility do not need specific monitoring, recordkeeping and reporting to ensure compliance.

Condition 11

Legal Basis: [18 AAC 50.350(m)(3), 9/4/98]

Factual Basis: The regulations require the Permittee to certify that their insignificant sources comply with applicable requirements. The condition restates the regulatory requirement.

Condition 12

Legal Basis: [18 AAC 50.040(b)(3) & 18 AAC 50.350(d)(1), 1/18/97]

[Federal Citation: 40 C.F.R. 61, Subpart M, 12/19/96]

If the Permittee engages in asbestos demolition and renovation, then these requirements may apply.

Factual Basis: The condition cites and requires compliance with the regulations that will apply if the Permittee engages in asbestos demolition or renovation. Because these regulation include adequate monitoring and reporting requirements and because the Permittee is not currently engaged in such activity, simply citing the regulatory requirements is sufficient.

Condition 13

Legal Basis: [18 AAC 50.040(d) & 18 AAC 50.350(d)(1), 1/18/97]
[Federal Citation: 40 C.F.R. 82, Subpart F, 7/1/99]

Factual Basis: The condition cites and requires compliance with the regulations that will apply if the Permittee uses certain refrigerants. Because these regulation include adequate monitoring and reporting requirements and because the Permittee is not currently engaged in such activity, simply citing the regulatory requirements is sufficient

Condition 14

Legal Basis: [18 AAC 50.030, 1/1/00[& 18 AAC 50.350(f)(2)-(3), 1/18/97]

Factual Basis: This condition is necessary to implement a requirement of 18 AAC 50. The requirement is not part of Alaska's federally approved SIP and is not federally enforceable. This condition restates a requirement of Alaska's State Air Quality Control Plan.

Condition 15

Legal Basis: [18 AAC 50.045(a), 1/18/97]

Applies to the Permittee because the Permittee must comply with emission standards in 18 AAC 50.

Factual Basis: The requirement prohibits diluting emissions as a means of compliance. In practical terms, dilution only affects compliance when the emissions are being measured. Careful reviews of source test plans and operating conditions should reveal any dilution as a result of the introduction of non-process air into the exhaust.

Condition 16

Legal Basis: [18 AAC 50.040(e), 7/2/2000; 18 AAC 50.045(d), 1/18/97;
18 AAC 50.350(d)(1), 1/18/97; & 18 AAC 50.350(g)–(i), 1/18/97]

Applies to the Permittee because the Permittee will engage in industrial activity at the facility.

Factual Basis: The condition restates the regulatory prohibition on fugitive dust. This prohibition calls for reasonable precautions to be taken to prevent particulate matter from being emitted into the ambient air while engaged in industrial activities.

The Permittee must keep records describing all precautions taken to prevent particulate matter from becoming airborne due to any of the activities described in this condition. If the

precautions are not listed in the State Air Quality Control Plan, then the Permittee must also record a statement describing why the Permittee believes the precaution is reasonable. This monitoring ensures that the Permittee takes the reasonable precautions and has a reason for deciding if the precaution is reasonable.

The Permittee must perform visual surveys at least once each month, and take corrective action if particulate matter is observed leaving the property. This is intended to identify whether the reasonable precautions taken are working, and to correct the problem if the precautions are not working.

Condition 17

Legal Basis: [18 AAC 50.055(g) & 18 AAC 50.310(m), 1/18/97]

Applies to the facility because the facility contains a stack or source modified after November 1, 1982.

Factual Basis: The condition restates the prohibition on stack injection (i.e. disposing of material by injecting it into a stack). No specific monitoring for this condition is practical. Compliance is ensured by inspections, because the source or stack would need to be modified to accommodate stack injection.

Condition 18

Legal Basis: [18 AAC 50.350(f)(4), 1/18/97]

This condition prohibits open burning at the facility.

Factual Basis: The Permittee requested an open burning prohibition.

Condition 19

Legal Basis: [18 AAC 50.040(e), 7/2/2000; 18 AAC 50.110, 5/26/72; 18 AA 50.240(c), 18 AAC 50.350(d)(1) & 18 AAC 50.350(g)–(i), 1/18/97]

Applies to the facility because the facility will have emissions.

Factual Basis: The condition restates the general prohibition on injurious air emissions, which applies to any emissions from the facility. While the other permit conditions and emissions limitation should ensure compliance with this condition, unforeseen emission impacts can violate this standard. These violations would go undetected except for complaints from affected persons. Therefore, to monitor compliance, the Permittee must monitor and respond to complaints.

The Permittee is to report any complaints and injurious emissions. The plant does not handle any large quantities of hazardous air pollutants. The Permittee must keep records of the date, time, and nature of all complaints received and summary of the investigation and corrective actions undertaken for these complaints and to submit copies of these records upon request of the department.

Condition 20

Legal Basis: [18 AAC 50.235(a) & 18 AAC 50.350(f), 1/18/97]

Applies to the facility because the facility contains equipment subject to a technology-based emission standard.

Factual Basis: This condition restates a regulation that requires the Permittee to take reasonable steps to minimize emissions if certain activity causes exceedance of a technology-based emission standard. Because the technology-based emission standard itself is a condition of the permit, the Permittee will report the excess emissions under condition 34. Because the excess emission report requires information on the steps taken to minimize emissions, this report is adequate monitoring for compliance with this condition.

Condition 21

Legal Basis: [18 AAC 50.335(a), 1/18/97]

Applies if the Permittee intends to renew the permit.

Factual Basis: The condition restates the regulatory deadlines, citing the specific dates applicable to the facility. Submittal of the renewal application is sufficient monitoring, recordkeeping and reporting.

Condition 22

Legal Basis: [18 AAC 50.220(a) & 18 AAC 50.345(a)(10), 1/18/97]

Standard condition to be included in all permits.

Factual Basis: The condition requires the Permittee to conduct source tests as requested by the department, therefore no monitoring is needed. Conducting the requested source test is its own monitoring.

Conditions 23 -25

Legal Basis: [18 AAC 50.030, 1/1/00; 18 AAC 50.035, 7/2/00 & 18 AAC 50.040, 7/2/00]

[18 AAC 50.220(b)–(c), 1/18/97; 18 AAC 50.350(g), 1/18/97]

[18 AAC 50.990(88), 1/18/97]

[Federal Citation: 40 C.F.R. 51, Appendix M, 7/1/97]

[Federal Citation: 40 C.F.R. 60, 40 C.F.R. 61, 40 C.F.R. 63, 7/1/99]

Applies when the Permittee is required to conduct a source test.

Factual Basis: These conditions restate regulatory requirements for source testing. As such, they supplement the specific monitoring requirements stated elsewhere in this permit. The tests reports required by later conditions adequately monitor compliance with these conditions, therefore no specific monitoring, reporting, or recordkeeping is needed.

Conditions 26 -28

Legal Basis: [18 AAC 50.345(a)(10), 1/18/97; 18 AAC 50.350(b)(3), 1/18/97]
[18 AAC 50.350(g)–(i), 1/18/97]

Applies when the Permittee is required to conduct a source test.

Factual Basis: Standard condition 18 AAC 50.345(a)(10) is incorporated through these three conditions. Because this standard condition supplements specific monitoring requirements stated elsewhere in this permit, no monitoring, reporting, or recordkeeping is required. The source test itself is adequate to monitor compliance with this condition.

Condition 29

Legal Basis: [18 AAC 50.220(f) & 18 AAC 50.350(g), 1/18/97]

Applies when the Permittee tests for compliance with the particulate matter standard.

Factual Basis: The condition incorporates a regulatory requirement for particulate matter source tests. The Permittee must use a certain equation to calculate the particulate-matter emission concentration from the source test results. Because this condition supplements specific monitoring requirements stated elsewhere in this permit, no monitoring, reporting, or recordkeeping is required.

Condition 30

Legal Basis: [18 AAC 50.205, 1/18/97; 18 AAC 50.345(a)(9), 1/18/97]
[18 AAC 50.350(b)(3), 1/18/97; 18 AAC 50.350(i), 1/18/97]

Applies because the permit requires the Permittee to submit reports, and because the condition is a standard condition.

Factual Basis: This condition restates the regulatory requirement that all reports must be certified. To ease the certification burden, the condition allows the excess emission reports to be certified with the semi-annual operating report, although the excess emission reports must be submitted more frequently. This condition supplements the reporting requirements of the permit and no monitoring, recordkeeping or reporting for this condition is needed.

Condition 31

Legal Basis: [18 AAC 50.350(i), 1/18/97]

Applies because the Permittee is required to send reports to the department.

Factual Basis: This condition merely specifies where submittals to the department should be sent. Receipt of the submittal at the correct department office is sufficient monitoring for this condition. This condition supplements the reporting requirements of the permit and no monitoring, recordkeeping or reporting for this condition is needed.

Condition 32

Legal Basis: [18 AAC 50.200, 1/18/97; 18 AAC 50.345(a)(8), 1/18/97]
[18 AAC 50.350(b)(3), 1/18/97; 18 AAC 50.350(g)–(i), 1/18/97]

Applies to all permittees, and incorporates a standard condition

Factual Basis: Incorporates a standard condition in regulation, which tells the Permittee to submit information requested by the department. Receipt of the requested information is adequate monitoring.

Condition 33

Legal Basis: [18 AAC 50.350(h), 1/18/97]

Applies to records required by a permit.

Factual Basis: The condition restates the regulatory requirements for recordkeeping, and supplements the recordkeeping defined for specific conditions in the permit. The records being kept provide adequate evidence of compliance with this requirement, therefore, no additional monitoring, recordkeeping or reporting is required.

Condition 34

Legal Basis: [18 AAC 50.235(a)(2), 18 AAC 50.240(c) & 18 AAC 50.350(i), 1/18/97]

Applies when the emissions or operations deviate from the requirements of the permit.

Factual Basis: This condition satisfies two regulatory requirements related to excess emissions—the technology-based emission standard regulation and the excess emission regulation. Although there are some differences between the regulations, the condition satisfies the requirements of each regulation.

The condition does not mandate the use of the department's reporting form, but it does specify that the information listed on the form must be included in the report.

The reports themselves and the other monitoring records required under this permit provide an adequate monitoring of whether the Permittee has complied with the condition.

Therefore, no additional monitoring, recordkeeping or reporting is required.

Condition 35

Legal Basis: [18 AAC 50.040, 7/2/2000 & 18 AAC 50.350(i)(2), 1/18/97]
[Federal Citation: 40 C.F.R. 60, 40 C.F.R. 61 & 40 C.F.R. 63, 7/1/99]

Applies to facilities subject to NSPS and NESHAP federal regulations.

Factual Basis: The condition supplements the specific reporting requirements in 40 C.F.R. 60, 40 C.F.R. 61 and 40 C.F.R. 63. The permit does not need any monitoring, recordkeeping or reporting. The reports themselves are adequate monitoring for compliance with this condition.

Condition 36

Legal Basis: [18 AAC 50.350(d)(4), 1/18/97]

[18 AAC 50.350(f)(3), 1/18/97]

[18 AAC 50.350(i), 1/18/97]

Applies to all permits.

Factual Basis: The condition restates the requirements for reports listed in regulation. The condition supplements the specific reporting requirements elsewhere in the permit and does not need any monitoring, recordkeeping or reporting. The reports themselves are adequate monitoring for compliance with this condition.

Condition 37

Legal Basis: [18 AAC 50.350(j), 1/18/97]

Applies to all Permittees.

Factual Basis: This condition specifies the periodic compliance certification requirements, and specifies a due date for the annual compliance certification. Because this requirement is a report, no monitoring, recordkeeping or reporting is needed.

Condition 38

Legal Basis: [18 AAC 50.350(f)(3), 1/18/97]

[Federal Citation: 40 C.F.R. 52.12(c), 7/1/99]

Applies to all federally approved permits.

Factual Basis: This condition clarifies that any credible evidence can be used to verify compliance with the permit, not just the monitoring required under the permit. This condition is necessary to ensure compliance with the Clean Air Act. No monitoring, recordkeeping, or reporting is necessary for this condition.

Conditions 39 -45

Legal Basis: [18 AAC 50.345(a)(1)–(7) & 18 AAC 50.350(b)(3), 1/18/97]

Applies to all operating permits.

Factual Basis: These are standard conditions required for all operating permits.

Condition 46 - 48

Legal Basis: [18 AAC 50.350(l), 1/18/97]

Applies because the Permittee has requested a shield for the applicable requirements listed under this condition.

Factual Basis: The following table explains the permit shield requests and the department's applicability determination. The permit conditions sets forth the requirements that the department determined were not applicable to the facility, based on the permit application, past operating permit, construction permits and inspection reports.

Table 2. Permit Shield Decision

Shield requested for:	Shielded?	Reason for shield decision
40 C.F.R. 60, Subpart GG	Yes	Applicant certified Source IDs 1-2 were installed before October 3, 1977.
40 C.F.R. 60 Subparts K, Ka, Kb	Yes	Applicant certified Insignificant Source C-GT34 was installed before May 19, 1978. Therefore none of the standards are applicable.
40 C.F.R. 61	No	Removing asbestos makes facility subject to 40 C.F.R. 61
40 C.F.R. 63	Yes	Permittee has certified there are no hazardous air contaminants at the facility.
40 C.F.R. 82	No	Triggered if the Permittee uses certain refrigerants

Conditions 49 - 57

Legal Basis: [18 AAC 50.350(g)–(i), 1/18/97]

Applies because these conditions detail the monitoring, recordkeeping, and reporting required in conditions 4 and 5.

Factual Basis: Each permit term and condition must include monitoring, recordkeeping and reporting for the Permittee to show verifiable compliance with each permit term and condition. The Permittee must establish by actual visual observations which can be supplemented by other means, such as a defined Facility Operation and Maintenance Program, that the facility is in continuous compliance with the State's emission standards for visible emissions and particulate matter. The correlation between particulate matter and visible emissions that is the basis for this monitoring procedure is discussed under conditions 4 and 5.

These conditions detail a stepwise process for monitoring compliance with the State's visible emissions and particulate matter standards for liquid and gas fired sources. Equipment types covered by these conditions are internal combustion engines, turbines, heaters, boilers, and flares. Initial monitoring frequency schedules are established along with subsequent reductions or increases in frequency depending on the results of the self-monitoring program.

Monitoring frequencies for hydrocarbon fuels, both liquid and gaseous, are detailed in these conditions. The monitoring intervals for gaseous fuels are less frequent than for liquid fuels in recognition of the reduced propensity of gaseous fuels to produce particulate matter as a result of combustion. This reduced level of monitoring for individual facilities in conjunction with the very large number of gas fired sources in Alaska should provide the Department with sufficient data to evaluate the compliance history of these sources as a category.

Reasonable action thresholds are established in these conditions that require the Permittee to progressively address potential visible emission problems from sources either through maintenance programs and/or more rigorous tests that will quantify whether a specific emission standard has been exceeded.

Notification of the Department via recordkeeping and reporting requirements are included in these conditions.